

5 Days

# **Cisco CCIE Wireless**

Cisco CCIE Wireless certification demonstrate proven wireless expertise of individuals to operate wireless local area networking (WLAN) technologies and carry the advanced knowledge of wireless networking.

The CCIE Wireless Written Exam (400-351) will validate the skills of a wireless engineer to plan, design, implement, operate and troubleshoot complex enterprise WLAN networks.

The Evolving Technologies module is included in the Written exam only. This module enables candidates to integrate their core technology expertise with knowledge of the evolving technologies that are being lately brought to places, such as cloud, IoT, and network programmability.

# **Course Details**

## **Course Outline**

#### 1.0 Planning & Designing WLAN Technologies

- 1.1 Describe WLAN organizations and regulations
- 1.2 Describe IEEE 802.11 standards and protocols
- 1.3 Plan & design wireless solutions requirements
- 1.3.a Translate customer requirements into services and design recommendations
- 1.3.b Identify ambiguity and/or information gaps
- 1.3.c Evaluate interoperability of proposed technologies against deployed IP network infrastructure & technologies
- 1.3.d Select an appropriate deployment model
- 1.3.e Regulatory domains and country codes
- 1.4 RF planning, designing, and validation
- 1.4.a RF Design / Site survey
- 1.4.b Architect indoor and outdoor RF deployments
- 1.4.c Construct an RF operational model that includes:
- 1.4.d Validate implemented RF deployment

### 2.0 Configuring and Troubleshooting the Network Infrastructure

- 2.1 Configuring and Troubleshooting wired infrastructure to support WLANs
- 2.2 Plan network infrastructure capacity
- 2.3 Configuring and Troubleshooting network connectivity for:
- 2.4 Configuring and Troubleshooting PoE for APs
- 2.5 Configuring and Troubleshooting QoS on the switching infrastructure
- 2.6 Configuring and Troubleshooting multicast on the switching infrastructure
- 2.7 Configuring and Troubleshooting IPv4 connectivity
- 2.8 Configuring and Troubleshooting basic IPv6 connectivity
- 2.9 Configuring and Troubleshooting wired security
- 2.10 Configuring and Troubleshooting network services

#### 3.0 Configure and Troubleshooting an Autonomous Deployment Model

- 3.1 Configuring and troubleshooting different modes and roles
- 3.2 Configuring and troubleshooting SSID/MBSSID
- 3.3 Configuring and troubleshooting security
- 3.4 Configuring and troubleshooting radio settings
- 3.5 Configuring and troubleshooting multicast
- 3.6 Configuring and troubleshooting QoS

#### 4.0 Configure and Troubleshoot a Unified Deployment Model (Centralized)

- 4.1 Configuring and controlling management access
- 4.2 Configuring and troubleshooting interfaces
- 4.3 Configuring and troubleshooting lightweight APs
- 4.4 Configuring and troubleshooting high availability and redundancy
- 4.5 Configuring and troubleshooting wireless segmentation
- 4.6 Configuring and troubleshooting wireless security policies
- 4.7 Configuring and troubleshooting Flexconnect and Office Extend 4.8 Configuring and troubleshooting Mesh
- 4.8 Conliguing and troubleshooting
- 4.9 Implement RF management
- 4.10 Configuring and troubleshooting WLC control plane security
- 4.11 Configuring and troubleshooting mobility
- 4.12 Configuring and troubleshooting multicast

#### 5.0 Configure and Troubleshooting a Unified Deployment Model (Converged)

- 5.1 Configuring and controlling management access
- 5.2 Configuring and troubleshooting Interfaces
- 5.3 Configuring and troubleshooting lightweight APs
- 5.4 Configuring and troubleshooting high availability and redundancy
- 5.5 Configuring and troubleshooting wireless segmentation
- 5.6 Configuring and Troubleshooting wireless security policies
- 5.7 Implement RF management
- 5.8 Configuring and troubleshooting WLC control plane security
- 5.9 Configuring and troubleshooting mobility
- 5.10 Configuring and troubleshooting multicast

#### 6.0 Configure and Troubleshoot Security & Identity Management

6.1 Configuring and Troubleshooting identity management

- 6.2 Configuring and Troubleshooting AAA policies
- 6.3 Configuring and Troubleshooting guest management

### 7.0 Configuring and Troubleshooting Prime Infrastructure and MSE

- 7.1 Configuring and Troubleshooting management access
- 7.2 Perform basic operations
- 7.3 Perform maintenance operations
- 7.4 Security management
- 7.5 Implement and troubleshoot MSE
- 7.6 Integrate ISE
- 7.7 Integrate netflow

#### 8.0 Configuring and Troubleshooting WLAN media and application services

- 8.1 Configuring and Troubleshooting voice over wireless
- 8.2 Configuring and troubleshooting video and media
- 8.3 Configuring and troubleshooting mDNS
- 8.4 Configuring and troubleshooting AVC and NetFlow

#### 9.0 Evolving Technologies

## Pre Requisite

- There are no specific prerequisites for CCIE certification.
- Instead, candidates must first pass a written exam and then the corresponding hands-on lab exam.
- Also, a candidate is expected to possess a thorough understanding of the exam topics and strongly encouraged to have three to five years of job experience before attempting certification.

### **Exams**

CCIE Wireless Written Exam CCIE Wireless Lab Exam []

464, Udyog Vihar Phase V,Gurgaon (Delhi +91 8882 233 777 training@mercury.co.in www.mercurysolutions.co NCR)-122016,India

Date - Apr 20, 2024